

CLAIMS

1. A floor covering for motor vehicles, with a tufted velour carpet layer (31), comprising a tuft carrier (18) which carries pile knots and has longitudinal rows of tufts (24), comprising zigzagged back-stitches (25), on the underside thereof, characterised in that the tuft carrier (18) comprises a plurality of perforations (28) defining gaps (37) between the pile knots, said perforations having been produced by tufting needles without pile yarn.
2. The floor covering according to claim 1, characterised in that in parallel transverse rows (27) of tufts a perforation (28) which defines a gap (37) between the pile knots in each case alternates with a pile knot (29).
3. The floor covering according to claim 1, characterised in that in parallel transverse rows (27) of tufts a single perforation (28) which defines a gap (37) between the pile knots in each case alternates with two pile knots (29).
4. The floor covering according to any one of claims 1 to 3, characterised in that in relation to its entire surface, the velour carpet layer (31) comprises an essentially homogeneous pile knot density.
5. The floor covering according to claim 1, characterised in that in parallel transverse rows (27) of tufts at least one region is formed in which several pile knots (29) are placed in sequence, and at least one region is formed in which each individual perforation (28) defining a gap (37) between the pile knots is followed by one pile knot (29).
6. The floor covering according to claim 1,

characterised in that

in parallel transverse rows (27) of tufts at least one region is formed in which three or more pile knots (29) are placed in sequence, and at least one region is formed in which each individual perforation (28) defining a gap (37) between the pile knots is followed by two pile knots (29).

7. The floor covering according to any one of claims 1 to 6, characterised in that consecutive back-stitches (25) on the respective longitudinal row (24) of tufts encompass an angle (α) of at least 100° .
8. The floor covering according to any one of claims 1 to 7, characterised in that consecutive back-stitches (25) on the respective longitudinal row (24) of tufts encompass an angle (α) of at least 110° .
9. The floor covering according to any one of claims 1 to 8, characterised in that the spacing (C) between consecutive parallel transverse rows of tufts (27) is approximately identical to the spacing (D) of adjacent perforations (28) in the respective transverse rows (27) of tufts.
10. The floor covering according to any one of claims 1 to 9, characterised in that the height or length of the pile knots (29) is at least 7 mm.
11. The floor covering according to any one of claims 1 to 10, characterised in that the pile knot mass per unit area of the velour carpet layer (31) ranges from 200 to 250 g/m².
12. The floor covering according to any one of claims 1 to 11, characterised in that the tuft carrier (18) comprise a maximum of 175,000 pile knots per m².

13. A method for producing a tufted velour carpet layer (31) as part of a motor vehicle floor covering (30), in which method, by means of a plurality of tufting needles (20) held in a needle holder (2), a plurality of pile yarn (22) is introduced into a tuft carrier (18) according to a racking technique in such a way as to create longitudinal rows (24) of tufts, comprising zigzagged back-stitches (25), on the underside of the tuft carrier (18),
characterised in that
a plurality of perforations (28) defining gaps (37) between the pile knots are produced in the tuft carrier (18) by means of tufting needles (20) without pile yarn.
14. The method according to claim 13,
characterised in that
the perforations (28) defining the gaps (37) between the pile knots are introduced such that in parallel transverse rows (27) of tufts a perforation (28) which defines a gap (37) between the pile knots in each case alternates with a pile knot (29).
15. The method according to claim 13,
characterised in that
the perforations (28) defining the gaps (37) between the pile knots are introduced such that in parallel transverse rows (27) of tufts a single perforation (28) which defines a gap (37) between the pile knots in each case alternates with two pile knots (29).
16. The method according to any one of claims 13 to 15,
characterised in that
the advance movement of the tuft carrier (18) and the sliding movement of the tufting needles (20) are matched such that the spacing (C) between subsequent parallel transverse rows (27) of tufts is larger than the amount (E) by which the tufting needles (20) in the racking technique are offset from one transverse row (27) of tufts to another transverse row (27) of tufts.

17. The method according to any one of claims 13 to 16,
characterised in that
the spacing (C) between two adjacent parallel transverse rows
(27) of tufts approximately corresponds to the spacing (D)
between adjacent tufting needles.
18. The method according to any one of claims 13 to 17,
characterised in that
in relation to its entire surface, the velour carpet layer (31)
is produced such that it comprises an essentially homogeneous
pile knot density.